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TRIP REPORT NO. CAR/KYR-5

NEEDS ASSESSMENT OF PRIMARY PHYSICIANS IN ISSYK-KUL OBLAST, KYRGYZSTAN

April 4–14, 1995

Prepared under Task Order 223 by:
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SUMMARY

This trip report describes the observations and recommendations resulting from a visit by Dr. Buxbaum to Issyk-kul Oblast, Kyrgyzstan, between April 4 and 14, 1995. The principal settlement is the city of Karakol, population 70,000. In addition to Karakol, the consultant visited the outlying area of Dzhety-Oguz. As an Intensive Demonstration Site (IDS) for insurance reform, patterns of reimbursement are expected to change, exerting pressures on clinical practice. Positive outcomes will include: lowered hospital admissions, shorter length of stay, and greater assumption of clinical responsibilities at the primary care level. Dr. Buxbaum examined the primary care sector and recommended changes to bring it into alignment with anticipated changes in financing. A move already under way is the creation of practice units called APTKs (roughly: associations of internists, pediatricians, and gynecologists), usually consisting of three clinicians linked by practice patterns to an identified geographic population in a section of the community. In fact, these represent embryonic small group practices.

BACKGROUND

The Kyrgyz health system, inherited from the Soviets, is a hierarchically structured organization characterized by central decisionmaking and budgeting. It was and is top–heavy with hospital beds and specialists. An exceedingly small level of initiative is ceded to primary care clinicians. Patients who enter at the primary care level are said to be frequently referred to specialists. Once in the specialty sector, chances of hospital admission are fairly high, and length of stay is long (on average, 14.9 days, down from about 20 in the Soviet era).

The system embodies a kind of rationality which, on paper, possesses a fairly unassailable logic: a central set of teaching institutions are associated with the single medical school in the capitol, Bishkek, tertiary hospitals are staffed with appropriate specialists, secondary community hospitals are placed in a rational way, polyclinics exist, in which a variety of specialists and primary caregivers deliver care, "ambulatories" (more rural aggregates of primary clinicians and mid-levels) are established in less populated regions, and feldsher stations serve the most remote districts. The feldsher is the uniquely Soviet mid-level clinician, somewhat akin to a nurse–practitioner in the United States.[1]

The observer's bias

This system, and its projected APTK reform, must be seen in terms of the observer's biases. Thus this report will refer to unique organizational initiatives which characterize the US system, particularly in the areas of primary care, and to the important organizational form of practice known in the United States as multispecialty group practice.

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[1] World Health Organization, Regional Office for Europe, Copenhagen. *HiT on Kyrgyzstan; Profile on Health Care in Transition*. Copenhagen 1994.

- Primary care development in the United States is currently divided into two principal camps: family practice and specialty/primary care practice. In the first instance, practitioners are trained, after medical school, in residency programs (some in university hospitals but more often in community-based institutions) consisting of a three-year term in which adult and child medicine, surgery, and OB/GYN issues are emphasized: the expected range of challenges which might face a solo or family-oriented group practitioner in any community. Often, the family practitioner will be located outside of urban areas, which by contrast are heavily specialist-oriented.

- A second type of practitioner, usually trained in an academic medical center, takes a residency in internal medicine/primary care or pediatrics/primary care. There is more emphasis upon teaching and research, and the individual is more likely to find him/herself later in one of the larger group practices or HMOs, usually in a large multispecialty practice.

- The leadership in American medicine, academic, hospital, and governmental, has committed itself to a goal of 50 percent generalists and 50 percent specialists. This trend is seen in other countries as well, and is a recognition of the need to control expenses and hospitalization by vesting more responsibility in the hands of primary care practitioners and ambulatory settings.

- Somewhat overlooked in the current U.S. debate about reform, but nonetheless important, is the phenomenal growth of multispecialty group practice. This type of collaborative practice was invented in the U.S. (The Mayo Clinic was the prototype, in the last part of the 19th Century) and has grown to the point that about 33 percent of American physicians are in groups.[2] Similarly, group practice has begun to expand in Great Britain. The polyclinics of the Soviet system represent—on paper—something similar to multispecialty group practice, but in reality lack the entrepreneurial and professional characteristics which have made the movement in the United States so vigorous and successful. Since the goal of the health reform project in the NIS is privatization of the health sector, it makes sense to look at what factors have made American private multispecialty group practice successful.

The Structure of Health Care in Kyrgyzstan[3]

As mentioned previously, the organization of health care in Kyrgyzstan closely followed the Soviet system. Efforts at reorganization will cause unavoidable strain and displacement.

In 1990, there were almost 15,000 physicians in Kyrgyzstan, or 33.5/10,000 population (OECD average 19/10,000; highest: Belgium, with 26/10,000). While emigration may have changed these

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[2] American Medical Association. *Medical Groups in the US; a Survey of Practice Characteristics*, 1993 Edition. Chicago, American Medical Association, 1993.

[3] World Health Organization. *Op. cit.*

numbers somewhat, between 1989 and 1991 the numbers of physicians, feldshers, and others in the health delivery area have grown more rapidly than the population.

Further, not only does Kyrgyzstan have more physicians than most countries, but like the former Soviet Union, large numbers (probably 70 percent) are specialists. Specialists work both in hospitals and in the ambulatory sector.

Kyrgyzstan is oversupplied with hospital beds when compared to other countries (except for its neighbor, Kazakhstan):

Country or Group of Countries	Hospital Beds/1000
Kyrgyzstan	12.1
OECD Average	9.3
Middle Income Countries	4.8
High Income Countries	8.4
Kazakhstan	13.6

Length of stay in 1991 was 14.9 days, a figure which would be considerably lower if rigorous standards regarding appropriateness of care were adopted in the hospital sector. Average occupancy rate in 1991 was 79 percent.

The medical care system consists of:

1 Central Republic Hospital
5 regional hospitals
50 specialized hospitals, including maternity and children's hospitals
36 city hospitals
40 district hospitals
137 rural hospitals
191 polyclinics
930 feldsher's stations
430 pharmacies.

OBJECTIVES

The purpose of this trip was to determine the needs, both in terms of equipment and training, of clinicians who provide primary care in the Issyk-kul Oblast of the Kyrgyz Republic. The Oblast is an Intensive Demonstration Site (IDS) in which the active reform measures being undertaken consist of:

- insurance reform, with an emphasis upon privatization[4] and
- organizational reform, consisting of a realignment of primary care specialists into teams (APTKs), consisting of a primary care internist, a primary care pediatrician, and a gynecologist.

The aim of this consultation was to determine the characteristics of primary care delivery in this region and to recommend necessary changes in the newly reorganized APTKs. APTK represents a small group practice. The translated equivalent means Association of Pediatricians, Therapists (= Internists) and Gynecologists.

ACTIVITIES

A U.S.-based architect with considerable overseas experience was also on the project team. Her observations were shared with the clinician, Dr. Buxbaum, and *vice versa.* During this consultancy, Dr. Buxbaum:

- Interviewed physicians and, in a number of instances, observed their practices. In addition, he interviewed a number of officials of the health system.
- Observed facilities, including polyclinics (several of which house APTKs), hospitals, small outlying practices (ambulatories), and feldsher stations. (A feldsher is a nurse with additional training and responsibilities, similar to a nurse-practitioner in the U.S.).
- Reviewed statistics, insofar as they were available for practices, as well as health indices of the community.
- Interviewed specialists from the local community with the aim of enlisting their contributions to the upgrading of primary physicians' skills.
- Conducted a skills assessment of primary care practitioners, resulting in the development of a set of basic minicourses to be taught by the faculty in the text below.

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[4] Abt Associates, Inc. *Health Care Finance and Service Delivery Reform Program: Country Action Plan, Kyrgyzstan*. Submitted to the United States Agency for International Development Regional Mission for Central Asia, Almaty, Kazakhstan under Contract No CCN-0004-C-00-4023-00. Revised April 1995.

- Paid specific attention to the equipment needs of clinicians, their practice environment, and to factors which would improve their clinical functioning as well as their efficiency. As a result, developed a **Basic Equipment List** for good practice.

FINDINGS

The Realities of the System

In spite of the intensely rational nature of the system, with its logical division of labor and emphasis upon specialization, in actuality it is inefficient, cumbersome, and (for many clinicians) demoralizing. No premium is placed on efficiency or productivity, and the primary care sector—the main focus here—which could do so much to help rationalize the system if fully functional, has yet to come up to even the most basic standards of good medicine.

Equipment needs:

Any physician must conduct a number of daily tasks. Direct observation of the clinical activities of primary caregivers reveals that the challenges patients present to the doctor are strikingly similar to that seen in a clinician's practice in western settings. This is really no surprise, since patients worldwide come to the doctor for a fairly standard set of reasons, ranging from organic disorders to a need for counseling and advice.

However, almost all visits to a clinician require a certain amount of basic equipment to be able to confidently evaluate each patient. **The Basic Equipment List** spells this out. Taking blood pressure (with appropriately sized cuffs), examining the ears and eyes, and checking reflexes and sensation require a few basic but indispensable tools. Any doctor lacking these essentials is severely limited in his or her ability to evaluate the patient completely.

For instance, in the case of a child who presents with symptoms of an ear infection, otoscopic examination of the ear is absolutely essential. In the current system (in which this basic piece of equipment is lacking), physicians admitted that they usually refer children to an otolaryngologist for examination and treatment. In any primary caregiver's office, this examination should be part of the day-to-day activity, and treatment predicated upon the findings of the office examination.

It was also obvious that the periodic examination of the diabetic patient, which must include an evaluation of peripheral sensation and reflexes as well as a careful retinoscopic exam, was hindered by the lack of tools like reflex hammers, tuning forks, and ophthalmoscopes. When the physician relies completely upon a limited physical examination, excessive referral of patients to specialists and hospitals results.

The gynecologic exam, which is a standard part of most internists' and all family practitioners' practices in the U.S. (as well of course of gynecologists'), is performed under primitive circumstances in polyclinics in Kyrgyzstan. No lighting was seen in several settings, daylight

through an unshaded window being used instead. The lack of privacy is striking, and equipment deficiencies assure that inadequate examinations are performed.

The correction of these equipment deficiencies would place the Kyrgyz clinicians working in the Issyk-kul APTKs on a par with their western primary care colleagues. However, this is only a first step to assuring higher quality of care and increased responsibility at the primary care level. Considerable training will be needed; this will be discussed in a later section.

The Working Environment

Problems in the work setting affect the quality of practice in the polyclinics and hospitals observed in Karakol and elsewhere. It is a tribute to the professionals working in these settings that they maintain a fairly high degree of morale and levels of care in spite of these problems. The report by Susan Monserud, AIA deals with many of these aspects. But it is worth reporting the problems as seen from a clinical perspective as well.

Most **physical plants are old and outmoded**. Most of the time they were chilly; hallways and consultation rooms were uniformly unlit and dreary. A conspicuous lack of heat and lighting results almost certainly from energy-saving reasons.

Waiting areas are grim and unfriendly. Patients are lined up in the hallways outside a physician's office, but more often than not the door to the office is opened by a number of people, patients as well as workers, while exams are going on. This interferes with the proper pursuit of the examination and breaks the rule of confidentiality which is prized in western medical systems.

Ramps and elevators were nonexistent or nonfunctional; it is hard to see how handicapped persons might use these facilities.

Signs, when present, were inadequate, and unprofessional-looking.

Equipment in the X-ray departments and laboratory was sparse and antiquated. Because of the current economic situation, a polyclinic X-ray department which was inspected had sold their X-ray plates (to recover the silver) and was printing their images on paper!

The polyclinics seemed undervisited on most days, and became almost totally devoid of patients and staff by early afternoon. From that point on, the buildings seem unused.

Physicians in this district, as opposed to their western counterparts, seem almost never to place a stamp of personal character on their working spaces. While an occasional green plant was seen, there were no pictures, decorative calendars, desk accessories or other reminders of the occupant's presence or personality.

In almost every institution, whether inpatient or outpatient, the departments with the most amenities and appearance of comfort were the **physical therapy and herbal/massage sections**. Here there were carpets and the floors, infirmary-like curtained-off spaces, and plenty of green plants.

Training Needs

Vital to the success of a primary care-based system is confidence that the practitioners possess the requisite skills to perform competently and to assume responsibility for almost total care of their patients. Further, if the goal is to prevent unnecessary hospital admissions and to reduce specialist consultations, those in the primary care sector must possess skill and confidence beyond what now apparently exists.

This is borne out from a series of interviews of clinicians and observations of their practices by an experienced American clinician. Three examples will suffice here: the management of acute ear infection; the diagnosis, management, and prevention of complications of diabetes mellitus; and screening for breast cancer in adult women.

Several clinicians were asked how they might respond to the following case: a mother brings her child to the office with a history of crankiness, fever, and pulling at the ear for two days. The clinicians uniformly surmised that the child might have an ear infection (a common event among young children) but all said that they would not treat the problem in their setting. They cited the following factors:

- Lack of working otoscopes.
- Lack of recent experience in using an otoscope; several said that they had about two months' training while in medical school, but none since.

- A tradition of referral to ear specialists in any case in which an ear infection is suspected.

- One physician stated that she would treat such an infection when she could actually see (external) evidence of inflammation. This suggests that she would now treat a patient for whom the infection had progressed to serious levels, whose treatment should *actually* be under the care of a subspecialist.

Clinicians were asked how they might oversee the care of adult diabetic patients.

- There was interest in having a glucometer (an instrument which determines blood sugar instantly from a fingerstick sample, and which in the U.S. is used as well by patients at home to regulate their own diabetes) at each clinical station. However, no station possessed such an instrument;

- No physician felt she was equipped to screen for possible complications of diabetes. It is regarded as standard practice in western medicine to observe diabetics closely for evidence

of eye, kidney, skin, and neurological changes. The use of an ophthalmoscope, reflex hammer, and tuning fork should be routine. Diabetics in Issyk-kul are sent to an eye specialist on a regular basis, which is good practice, however.

- In many instances, physicians stated that they expected the endocrinologist to take responsibility for routine diabetic care.

- It was not possible to define any routine or organized nutritional counseling given to diabetic patients, although it is possible such exists.

- Because of the lack of home glucometer access and probably because of lack of medication as well, tight control of insulin-dependent diabetics is impractical.

- Podiatry services (considered an essential adjunct in American practices for diabetic care) appear to be nonexistent.

- Glycohemoglobin (Hgb A1C) assays—standard in the West—appear not be employed.

When asked how they might employ mammography for breast cancer screening, there appeared to be some confusion among clinicians over the role of mammographic screening. The technique does not appear to be available locally, so patients are probably sent to Bishkek, to the Republic Hospital. Clinicians seemed to think that it was appropriate to perform a mammogram in patients in whom a mass was palpated.

In fact, this is appropriate if only to ascertain that other, not palpable, lesions might be present. But in fact, the presence of a palpable mass is not what mammographic screening is designed for; it is meant to look for otherwise undetectable tumors.

While there appear to be discordances between Western standards and medical practice in Karakol, it should be emphasized that physicians appeared eager to learn and to retrain in ways which would bring them into alignment with their colleagues elsewhere. Hampering such advancement, however, is a *lack of materials, such as journals, electronic media access, and training courses designed to correct deficiencies*. In a number of instances, physicians (particularly younger ones) were aware of recent advances and stated that because of lack of funds, appropriate diagnostic and therapeutic initiatives could not be undertaken.

Correcting the Deficiencies and Empowering Primary Care

The first step to developing a strong primary care sector is to define the equipment needs of those working in this field. The **Basic Equipment List for Good Practice** is in Annex C of this report. Its implementation is vital to the success of the program.

The next step is to define a number of *specific immediate training needs* for the primary practitioners and to design courses and opportunities for advancement in primary care of a medium and long-term nature.

Training

Immediate training initiatives: The minicurricula which were designed and left in Issyk-kul Oblast for implementation are contained in Annex B of this report. Local faculty were recruited and are expected to revise and adapt the materials, which can be placed in use as soon as the Basic Equipment List has been put in place as well.

Each curriculum contains a set of objectives, an outline of the course material, and specifications of the personnel who should be trained.

Training of this type should be carried out at the local level, with local specialty resources, and can be used on a yearly, "refresher" basis.

Intermediate training initiatives: In addition to the immediate set of training programs, plans should be made now for programs which can be set in place in the medium term (next 1–3 years). These include:

- seminars, weekly to monthly, to be given by local, regional, and foreign experts on topics which would enhance the skills and functioning of primary care specialists;

- miniresidency programs, in which clinicians would spend a dedicated amount of time in a specialty setting (pulmonary, gynecology, dermatology, for example) in order to broaden and deepen their clinical skills;

- short courses: didactic seminars of a more concentrated (3 days to a week) nature, on some specific topic;

- subscriptions to journals and purchase of relevant texts;

- access to electronic media: e-mail, satellite, fax, CD-ROM. Most medical library materials are now available in these forms, making the establishment of libraries on site unnecessary. However, it is also clear that the universal language in this field is English, making it imperative that health professionals in Kyrgyzstan become familiar enough with the language to use both journals and the new electronic media.

Long-term training, consisting primarily of experiential instruction in settings where new developments of value to local clinicians can be learned, or where mentors can be identified.

- St. Petersburg was identified as one of these sites, and remains a fairly inexpensive training venue for local clinicians.

- In future, it will be desirable for clinicians from Kyrgyzstan to meet with their primary care counterparts in other parts of the world, including the United States and Great Britain. Collaborative research projects need to be constructed, and experiences shared.

- Fellowships and research assignments in Western countries, in which primary care initiatives have been undertaken, will be of value in moving the programs forward. These could be for six months to two years in duration.

Notes on the Future Organization of Care in Issyk-kul

As mentioned earlier, the evolution of primary care forms in the U.S. both informs and biases this report. In addition, at the moment is it unclear whether the system of primary care in Kyrgyzstan will come to rest upon a group of practitioners (the APTKs) consisting of primary care clinicians who share their skills but remain somewhat specialized, or whether a new type of general practitioner will emerge from training programs which have been proposed for the medical school in Bishkek.

However, the structural characteristics of the Soviet-style polyclinics which were inherited by the newly independent republics make it possible to imagine a system in which something like an American-style group practice (whether multispecialty or single specialty—i.e. family practice) might be developed under one roof. To a large extent, the success of such a transformation would require highly motivated physicians, a commitment by the health authority, and a high degree of dedication to collaborative practice as it is carried out by successful, private multispecialty groups which exist in the United States.

While multispecialty group practice is a uniquely American phenomenon, it should be mentioned that the move toward single-specialty group practice in Britain is strong; primary care is delivered by general practitioners, 90 percent of whom work for the National Health Service (NHS). In 1993, there were 26,289 general practitioners in Great Britain, 6,700 of whom were in groups of 10 or more, and 8,873 who worked in groups of four or five.[5] Fundholding by GPs requires, in fact, the establishment of larger practices, under the recent NHS reforms. In addition, these more complex group practices have been able to attract other team members, including nurses in an expanded role, community midwives, social workers, and psychologists. In a fundholding practice, 1.75 midlevels may be hired for each Principal (physician).[6] Fundholding practices have led the way to expanding beyond the previously narrowly defined scope of general practice. The argument has been made that while individual patient-physician contact is brief (6 to 8 minutes), the fact that the physician has a long-term relationship with the patient and knows the patient's history, social background, and

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[5] Marsh GN. *The future of general practice: caring for larger lists*. BMJ 1991. 303:1213-16.

[6] Kennedy J. Personal communication.

environmental features leads inevitably to a greater efficiency in clinical and time management.[7] This is similar to the experience of American group-model HMOs.

To a large extent, panel size in the U.S. and Great Britain, comparing the NHS with American HMOs, is remarkably similar. The Harvard Community Health Plan in New England regards an internist's ideal panel, for instance, as 1950 members, and British GP panel size is on average 1902 registered patients. In the American HMO, the usual booked appointment time is 15 minutes for a routine return visit, and 30 minutes for a first or yearly visit. In the 15 minute encounter, some time will be absorbed by nonclinical business, so on average the face-to-face experience is more like eight minutes. However, as in Britain, the physician knows his or her patient, has a wealth of record materials to draw on, and can usually efficiently manage the encounter to achieve a satisfactory goal; if not, further visits can be scheduled.

American group practice has grown and developed somewhat differently; from the British variety. Its history is longer, and there has been a willingness to try different kinds of models, since there is no central authority which mandates the character of groups. Thus, while the average size of American group practice is larger than the largest British groups, those with a single-specialty focus remain small.

Mean Size of Groups in U.S. (Physicians)[8]

Single Specialty	6.8
Family/General Practice	5.2
Multispecialty	24.6

While 45 percent of groups report three or four physicians, 189 groups report 100 or more physicians; the largest group consists of over 3,000. In the present climate of mergers and buyouts, it is clear that a trend to more complex group practices has emerged as well.

Regarding location, it is worth noting that in the most rural of American states, group practice can be highly successful in delivering high-quality care to a dispersed population: in North Dakota, where there are 39 groups, 94.6 per cent of the state's physicians practice in these groups.

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[7] Calnan M. *Professional reimbursement and management of time in general practice, an international comparison*. 1992. Social Science and Medicine 35:209-16.

[8] American Medical Association. *Physicians in Medical Groups: a Comparative Analysis*. Chicago, The American Medical Association, 1993.

Seventy-six percent of groups in the U.S. are professional corporations, fifteen percent are partnerships, three percent are associations. On average, 75.5 percent of a group's physicians are owners.

Are there lessons for Kyrgyzstan in this experience? Regarding panel size, the city polyclinic physicians average about 10.2 visits per day. If one adds the usual 2–3 home visits in the afternoon, the physician's **productivity** is still less than his or her American primary care counterpart, who will see almost twice as many patients per day and per year.

RECOMMENDATIONS

Overall, productivity can be improved by providing adequate support, including equipment, training, well-trained office and support staff, and information systems, among others. On the basis of this trip, Dr. Buxbaum recommends considering the following organizational, training and equipment changes:

Organizational Recommendations

- **Move away from the Soviet style system of health care to a less rigid system.** The Kyrgyz healthcare system, which was inherited from the former Soviet Union, is top-heavy with specialists, consists of too many hospital beds with excessive length of stay, and is characterized by a bureaucratic rigidity which places primary care at the lowest level of responsibility and competence. This is the inverse of current trends in many Western health systems.

- **Downsize the seriously overdoctored, overbedded, and overspecialized system in Kyrgyzstan**.

- **Eliminate redundant hospital capacity and physicians, and put a lean, trained corps of primary care physicians to work**. This means physicians would work fulltime, not (as now) partial days which result in unavailability of the personal physician. Given the financial problems of the system, it is clearly advantageous to pay fewer physicians well than to retain large numbers of doctors on the lists and to pay them either poorly or not at all.

- **Eliminate redundancy** in the clinical personnel portion of the system through retirement, re-examination for competency, and by competition among personnel for desirable positions in the practice community. The number of doctors in a given location should be limited, and new practices discouraged when an area is deemed full.

- **Carefully monitor and encourage** the APTK organizations to develop in such a way that the organization on which they are based will resemble a multispecialty group practice.

- **Reorganize the polyclinics** into multispecialty group practices which have as their ultimate aim management and direction by the physicians themselves. They can contract with a health authority or insurance organizations under a variety of models: capitation, prepayment (as in HMOs), or fee-for-service.

- **Discuss fiscal reform and the principles of organizational reform**, aimed at moving in the direction of multispecialty group practice, to assist in the development of the APTK sector.

- **Establish a basic information system** for recording patient encounters to achieve the proposed goals.

- **Keep statistics on the APTKs** and (eventually) the multispecialty group practices must be kept: panel size, visits (by type and length), age distribution of patients, severity of illnesses seen, numbers of referrals to specialists and hospitals, use of laboratory and imaging services, and pharmaceutical prescribing habits. Much of this will be useful as a management information system, and parts of it will be necessary for peer feedback comparison purposes.[9]

Training and Equipment Recommendations

- **Upgrade primary physicians' skills and tools**. While primary physicians have good basic training, they have not been equipped with the necessary tools which any good clinician needs to make an appropriate assessment of each patient. In addition, their basic skills have not, in many instances, been sufficiently reviewed or upgraded in a systematic way. Clinical responsibility for continuing patient care, now split among various providers, needs to be centered in the primary physician or group.

- **Provide primary physicians with the Basic Equipment Set and training** to increase their levels of competence. This should have favorable impact upon the utilization factors mentioned above.

- **Redesign the physical environment** with the aim of ensuring patient dignity, privacy, and confidentiality, and physicians should be afforded a more efficient and professional environment than they now enjoy. The principle of supporting the practice by enlightened leaders is strongly suggested, as well as the development of appropriate administrative and clinical support services.

- **Address the future professional needs of physicians,** beginning now; medium-term and long-term recommendations of a very specific nature are set out in the trip report.

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[9] Winickoff RN, Coltin KL, Morgan MM, Buxbaum, RC, and Barnett, GO. *Improving physician performance through peer comparison feedback.* Med Care 1984. 22: 527-534.

Ultimately, the new structures should come to characterize good practice for the community served, including ongoing primary care in a broadened role, pre- and post-hospital care, high standards of laboratory practice, high-level imaging, expanding the role of mid-levels, day surgery, preventive medical services, health education, community health awareness, and school and industrial health services. To the extent that urban and rural health service needs may differ, individualized approaches to each may be developed.

However, the structural nucleus of the APTK should be strengthened and developed as a model for future primary health care needs in Kyrgyzstan. To a certain extent, the existence of the polyclinic, with its resemblance in form to the highly successful American multispecialty group practice, provides Kyrgyzstan with a singular advantage over lesser developed parts of the world. What remains to be developed is the enhancement of the primary care sector, and this can be done through upgrading the skills and competencies of those physicians who will work in the newly defined organizations.

PERSONS CONTACTED

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Proposed Faculty for Minicourses

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Dr. Askat Zhumbaev, Internal Medicine/Cardiology, Oblast Hospital
Dr. Anna Akiizova, Surgeon, Oblast Hospital
Dr. Sharyi Moldozasheva, Ophthalmologist, Central Adult Polyclinic
Dr. Zhenya Akunova, Endocrinologist, City Polyclinic
Dr. Sharshen Yrsaliev, Chief of Otolaryrngology, Oblast Hospital

Other

Dr. Kulanbaev, private practice (internal medicine)

ANNEX A

PRELIMINARY RECOMMENDATIONS FOR ISSYK-KUL OBLAST

INTRODUCTION

The following is a preliminary set of recommendations made to the Issyk-kul Oblast Department of Health following a visit and observation of facilities and personnel during the period 5 April to 13 April 1995. The document addresses the specific technical and training needs of the physicians who are employed in the new APTK structures. These recommendations should be regarded as preliminary and perhaps incomplete, pending the final Trip Report which will submitted to Abt Associates in the near future.

The preliminary recommendations fall into two broad categories: equipment and training, and training is further subdivided into immediate, medium-term, and long-term categories.

The observer (RCB) is a primary care physician in a large multispecialty group practice. His clinical field of expertise is clinical and academic internal medicine, and he holds a faculty appointment at the Harvard Medical School in Boston, MA, USA. He has published articles on clinical and health policy subjects and is the author of one book, on exercise and health.

Supporting the Practice

It became clear to the observer after a number of visits that the physicians of the APTKs are well-motivated, enthusiastic, and generally well-grounded in basic clinical skills. While significant gaps in training are apparent (and will be dealt with in a later section), these cannot be corrected without first equipping the personnel with the basic tools which are the requisite minimum for any medical practice. Since the medical staff must be seen as clients, or customers, the basic motto of any administration should be:

Support the Practice of Medicine

Supporting medical practice

This concept accepts the idea that the among the most precious resources in a health care system are the personnel. The physicians who care for patients are at the front line of care. Like any professionals (teachers, soldiers, engineersm scientists), they must be provided with the tools and resources to do their work properly This requires:

1. Equipment

The equipment necessary for carrying out good medical practice was notably absent from all APTK practices visited. No physician could be expected to perform at an adequate level without these, and each physician indicated that she had had exper ience with these at one point or another in training. It is essential, then, for professional competence as well as for the safety and good health of patiients to provide the most basic equipment at once.

To this end, we are submitting a list of durable materials which we feel are indispensable for the good practice of medicine. Items like modern stethoscopes, oto-ophthalmoscopes, modern examination tables, devices to measure blood sugar, and so forth, will be on this list.
The basic equipment set, which Abt Associates will attempt to procure for a number of APTKs, will give the physicians in these practices the necessary tools to practice a high level of ambulatory medicine, on a par with their colleagues anywhere else in the world.

2. Administrative and technical support

Having the basic equipment is only the first step in bringing the level of practice to acceptable levels. Continuous administrative and technical support of these practices is a requirement to maintain quality and morale. Administrators must recognize that a successful primary care practice is capable of assuming the majority of care for a population and is cost effective and efficient, resulting in

* lowered hospital admissions
* lowered numbers of visits to emergency services
* reduced length of hospital stay
* reduced mortality and morbidity
* increased patient and provider satisfaction
* less loss of productivity for the affected population

What is required of administration, then, is a recognition of the prominence of primary care in a system of integrated health care. Given that, then resource allocation must address:

1. technical support: information systems, record keeping, maintenance of equipment and supplies, the aesthetic, mechanical, and environmental conditions surrounding work, patient privacy, and supplies;
2. ensuring the confidentiality of the physician-patient interaction;
3. assisting physicians in expeditiously performing their tasks and receiving information: referral, laboratory work, imaging services, and data from outside vendors;
4. and providing professional stimulation and supporting the moral of the clinical teams through motivation, rewards, and incentives appropriate to their work.

Upgrading and Maintaining Professional Skills

Placing the medical instruments in the hands of physicians is no guarantee that they will use these tools effectively. A physician's skills will rapidly deteriorate in the face of disuse or failure to renew his or her proficiencies. We recognize that by putting the basic equipment set in offices of the APTKs, we have taken only the first step. Our intention is to support these physicians and to benefit their patients by providing them with training which is appropriate to their practices. We make several assumptions:

* physicians appreciate the chance to learn new skills and maintain ones they have learned;
* the practice of medicine is in a process of constant change and requires a lifetime commitment to learning;
* medical practice in any region must be judged against evolving worldwide standards, requiring access to international sources of information and standards which are widely accepted, based upon research and investigation;
* and that the distinctive needs of the population being served, regional and local customs of care, and standards of community practice must also be honored and maintained.

To this end, a training program for APTK physicians is proposed as follows:

1. Immediate development of short-term, practical curricula using local faculty

A number of local experts, representing clinical skills including Endocrinology, Internal Medicine/Cardiology, Otolaryngology, Surgery, Ophthalmology, and Gynecology were interviewed and then presented with the opportunity to collaborate or to develop new curriculum materials for presentation at the ambulatory level for APTK physicians. These courses will be designed to be practical and brief, and can be presented in the ambulatory setting without seriously interfering with the physicians' responsibilities. Sample topics for presentation include:

* Management of diabetes mellitus
* Management of hypertension
* The examination of the ear and management of ear conditions
* Minor traumatology for the office-based physician
* Management of urinary tract infections
* The normal and abnormal gynecologic examination
* Modern concepts in the treatment of asthma

The list is presently being developed by this writer and by the group of local colleagues. Future topics for development will undoubtedly arise from discussion between the APTK physicians and their expert local consultants. The model to be used requires that the attendees show competence, in the judgment of the instructor, in each field. Checking the retina, for instance, requires not only

the presence of a working ophthalmoscope in the office, but understanding of the findings and an ability to record and interpret them in light of the disease being treated, and an understanding of when to refer to an expert consultant. At the completion of each course, a certificate will be issued.

Medium-term educational programs

APTK Physicians will benefit from courses and materials designed to enhance their practice of primary care. These can include (but not be limited to):

1. a newsletter for APTK physicians, with a distinctive primary care focus and reports on innovative approaches from local and general sources;
2. subscriptions to relevant journals as well as translations from the foreign literature;
3. short courses in pertinent primary care subjects to be given at local and republican institutions;
4. on-site weekly conferences; and
5. "miniresidencies": short training courses conducted at various institutions. Examples: training in pulmonary diseases and pulmonary function testing, cardiovascular training including the cardiovascular exam, EKG interpretation, and interpretation of noninvasive vascular testing (exercise testing, echocardiogram, nuclear scans);
6. learning diagnostic and treatment algorithms currently in use in the US.

Long-term education programs

The practice of medicine is rapidly becoming linked worldwide by the means of electronic media. At this time the common language is English, probably requiring that practitioners in countries like Kyrgystan attempt to upgrade their facility in this language. Email, satellite transmission, and access to databases such as MEDLINE and others are rapidly changing the nature of practice and information retrieval. The medical library has moved to wherever there is a computer with either a modem or a CD-ROM accessory.

In addition, physicians invariably benefit from experience in settings other than their own. In addition to learning new techniques, they become sensitized to styles of practice and outlooks which are determined by other cultural, economic, and social milieus. Training abroad, whether in Russia, Western Europe, North America, or elsewhere, can be broadening and enhancing.

To these ends, it is recommended that Abt Associates, in conjunction with the local authorities, explore the future educational needs of primary care physicians in the Oblast with the aim of taking advantage in the future of the benefits of information/technology transfer by electronic means, and the use of study programs aimed at enhancing the practice of primary care in the community.

Conclusion

These recommendations should be regarded as preliminary; they represent an effort to inform the client as expeditiously as possible, and to provide the client with an idea of the shape of the recommendations which will appear in a more inclusive form shortly. At the same time, it would be greatly appreciated if the client would comment and correct any misstatements or errors. The author is grateful to the hosts, including the Director and Staff of the Department of Health of the Oblast, for their cooperation, gracious hospitality, and support of the work being done in this district.

ANNEX B

MINICURRICULA FOR FAMILY PRACTITIONERS

I. Introduction

This paper describes a series of basic instructional programs for APTK physicians. It is predicated upon the premise that, as practitioners, they must upgrade and enhance their skills in order to participate fully in the newly formed small groups in which they will participate. Further, because the program will equip them with appropriate tools for office practice, instruction around the use of these office instruments will be necessary.

Each subject consists of a target audience, set of objectives, and specific course topics. The number of hours of instruction are specified, but are not to be regarded as anything more than guidelines. If a candidate requires more or less instruction, this should be the at the instructor's pleasure, guided by the specified objectives.

The courses are as follows:

1. Examination of the Ear in Adults and Children
2. Diabetes Mellitus in Adults: Diagnosis, Treatment, and Prevention of Complications
3. Hypertension in Adults: Rational Drug Therapy and Prevention of Complications
4. Urinary Tract Infection in Children and Adults: Rational Drug Therapy and Prevention of Complications
5. The Gynecologic Examination: Routine Yearly Screening for Cervical Cancer; Treatment of Routine Vaginitis; Detection of Pelvic Masses and Ectopic Pregnancy; Problems of Menopause
6. The Well Child: Growth and Development
7. The Sick Child: Assessment and Appropriate Therapy for Common Illnesses

II. Recommendation Regarding Use of Minicurricula

It is hoped that these examples will provide the basis for a series of courses for primary care physicians who will work in the newly formed group practices in Karakol and other areas in the Oblast. The outlines given above are an attempt to provide guidance only. If the local faculty persons who will administer these courses feel that the headings are too limiting or not inclusive enough, they should apply their best judgment and change the approach accordingly. The only consistent requirement is that these courses be brief and interactive.

In addition, there should be serious consideration to expanding the curricula to include more courses, and to setting a schedule for periodic review of each of the basics, perhaps in shorter form, on a regular basis, perhaps once yearly. This would have the advantage of refreshing each participant's fund of knowledge as well as to include newly recruited staff.

Finally, where local custom and practice differ significantly from the recommendations, local custom should take precedence.

Course 1: The Examination of the Ear in Adults and Children

A. Target audience

Primarily Internists, Pediatricians. Ob/Gyn to attend for basics only. In future, feldshers and nurses (in future, nurse-practitioners, if such a field is developed).

B. Course Objectives

In this course, the attendees will be expected to learn:

1. to use the office otoscope;
2. to recognize the landmarks of the normal ear: outer ear, external canal, tympanic membrane, normal light reflex;
3. to recognize wax and foreign objects;
4. to learn to remove wax and foreign objects with lavage;
5. to recognize and treat infection in the ear canal: bacterial and fungal;
6. to recognize and treat nonbacterial otitis media (serous otitis);
7. to recognize and treat bacterial otitis media
8. to perform hearing screening using gross and tuning fork methods;
9. to assess and differentiate various types of vertigo and gait disturbances: inner ear vs. cerebellar vs. neuropathies.

C. Course Outline

1. Anatomy and function of the normal ear: 2.0 hours
2. Practicum in ear examination: use of the otoscope in the normal adult and child's ear: 2.0 hours
3. Treatment of earwax, foreign bodies and otitis externa: 1.5 hours (with Practicum if possible)
4. Diagnosis and treatment of serous and bacterial otitis media: 1.5 hours (with Practicum if possible)
5. Tuning fork use; office neurologic assessment in vertigo and hearing problems: 1.0 hour

D. Course Structure

1. This is an eight-hour course, to be given at the APTK level if possible, or alternatively, in a polyclinic or hospital setting where patients with appropriate findings can be identified. For the examination of the normal adult ear, the participating physicians can be used as subjects, conditional on their willingness to do so.

2. The course may be given in convenient segments, at the pleasure of the instructor and the students.
3. Each attendee must demonstrate that he or she has fulfilled the objectives listed above (sections 3.2, 1–9) and will be given a certificate of achievement.

Course 2: Diabetes Mellitus in Adults: Diagnosis, Treatment, and Prevention of Complications

A. Target Audience

Internists. Pediatricians and Ob/Gyn for basics only. Office nurses for parts of course dealing with testing. Feldshers and other mid-level personnel as appropriate.

B. Course Objectives

In this course, the attendees will be expected:

1. to understand the pathophysiology and biochemistry of diabetes mellitus in adults;
2. to recognize insulin and non-insulin-dependent varieties of diabetes;
3. to assess and stabilize the patient who is suffering from diabetic ketoacidosis or insulin reaction;
4. to perform a comprehensive examination designed to elicit the presence or emergence of diabetic complications:
    - ophthalmologic changes
    - renal complications
    - peripheral vascular insufficiency
    - disorders of sensation
    - alteration in libido
    - skin and other infections, and their prevention, including tuberculosis
    - acute life-threatening complications of diabetes: ketoacidosis and insulin reaction
5. to learn how to counsel patients on self care, including:
    - diet, exercise, and alcohol use
    - smoking counseling
    - foot care and hygiene
    - insulin and drug use
    - special problems, such a sick days and gastroenteritis
    - creating a safe home environment for the neurologically impaired diabetic
6. to learn to use office laboratory assessment of diabetes:
    - the glucometer
    - the interpretation of glycohemoglobin tests (Hgb A1C)
7. to set up a protocol for the surveillance of diabetic patients, including:
    - visits at least four times a year by appointment
    - a special form to record data on functions listed above
    - a yearly ophthalmologic exam and intervention, when appropriate
8. to understand various types of insulin and oral medications
    - oral hypoglycemic medications
    - insulin types: short, medium, long-acting
    - split dosage (more than once daily)

complications of medications
drug interactions

C. Course Outline

1. Pathophysiology, genetics, and epidemiology of diabetes mellitus: 1.0 hour
2. Differentiating diabetic types: insulin-dependent, non-insulin-dependent: 1.0 hour
3. The approach to the diabetic patient: 2.5 hours
   - mild: diet, exercise
   - moderate adult-onset: diet, oral hypoglycemics
   - insulin-dependent
   - use of the glucometer and gylcohemoglobin testing
4. Complications of diabetes and their management: 4.0 hours
   - ophthalmologic
   - renal
   - peripheral vascular: pedal pulse assessment
   - infections: skin, respiratory, vaginal, urinary, other
   - neurological: testing for reflexes and peripheral sensation
5. Counseling the diabetic patient: 2.0 hours
   - self-care
   - the role of the nurse in teaching
   - self-assessment at home
   - diabetic groups
   - sick days
   - the role of exercise and diet

D. Course Structure

1. This is a 9.5 hour course which should be given as much as possible in a practical manner, using patients with demonstrated diabetes and its complications. Emphasis should be placed on the assessment of diabetic complications, using tools which are available in the APTK office, or (in the case of the glycohemoglobin test) at a central laboratory).

2. The course may be flexible; for instance, when a diabetic patient is seen at the APTK by specific appointment, the instructor could be invited to be present for consultation and teaching.

3. At the completion of the course, the attendees will receive a certificate showing that they have satisfied the course objectives in the opinion of the instructor(s).

Course 3: Hypertension in Adults; Rational Drug Therapy and Prevention of Complications

A. Target Audience

Internists and obstetricians-gynecologists (since the latter must deal with hypertension as a complication of pregnancy and as a consequence of eclampsia).

B. Course Objectives

In this course, the attendees will be expected to

1. learn the proper methods for determining blood pressure; review blood pressure measurement methodology and variations in normal;
2. understand the range of normal blood pressure in adults;
3. review current knowledge concerning the etiology of hypertension, including inadequately treated urinary tract infection
4. understand the incidence and prevalence of hypertension in this community, and the economic and social impact on society in general;
5. understand the role of weight, diet, salt and alcohol in the etiology of hypertension, and the extent to which lifestyle changes can affect hypertension;
6. appreciate the end-organ complications of hypertension and their incidence in untreated hypertension: cardiovascular, renal, ocular, cerebral;
7. achieve an understanding of the various pharmaceutical approaches to hypertension control, along with an understanding of the most cost-effective medications. Understand how best to achieve compliance in drug-taking by patients; and
8. plan and implement a protocol for following patients who suffer from hypertension.

C. Course Outline

1. Introduction: prevalence, incidence, epidemiology of hypertension. Pathophysiology. 1.0 hour.
2. Normal blood pressure: measurement methods. Use of large vs. normal cuff. 1.0 hour.
3. Funduscopic(retinoscopic) exam in hypertension. 1.5 hours.
4. Medication approaches in hypertension. 3.0 hours.
5. Complications of untreated hypertension 1.5 hours.
6. Assisting the patient in achieving compliance in taking medication. 0.5 hour.
7. Hypertension in pregnancy; special problems. 1.0 hour.

D. Course Structure

Nine and a half hours. A partial lecture, partial practical course whose aim is to emphasize the control of hypertension in order to prevent complications and to preserve organ function. It is aimed primarily at internists and gynecologists (who see hypertension as a complication of pregnancy). Nurses and mid-levels should attend as well. A certificate will be issued at the completion of the course.

Course 4: Urinary tract infection in children and adults; rational drug therapy and prevention of complications

A. Target Audience

Internists, pediatricians, and gynecologists

B. Course Objectives

In this course, the attendees will be expected to:

1. understand the incidence and epidemiologic implications of urinary tract infection;
2. understand the relationship between urinary infection, renal damage, and hypertension. Understand the cost to the individual and society of inadequately treated urinary infection;
3. understand differential considerations in children and adults, men and women;
4. understand the role of testing, including urinalysis, quick methods of analysis, imaging, and other procedures. Understand the role of anatomical and other predisposing factors, such a renal stones;
5. understand the role of prevention and prophylaxis in control of urinary tract infection;
6. learn appropriate pharmaceutical approaches to the control of acute and chronic urinary tract infection.

C. Course Outline

1. Urinalysis: methodology, interpretation 1.0 hour.
2. Incidence, prevalence, and epidemiology of urinary tract infection 1.0 hour
3. Predisposing factors in urinary tract infection. 1.5 hours.
4. Evaluating the patient as a whole. Prevention 1.0 hour.
5. Treatment protocols for acute urinary tract infection, pyelonephritis, sepsis, and chronic infection. 1.5 hours.

D. Course Structure

This course is appropriate for all physician members of the APTK: internist, pediatrician, and gynecologist. It lasts six hours and will consist of some practical work doing urinalysis, in addition to which will be some X-ray and ultrasound review as well as discussion. A certificate of proficiency will be given to attendees.

Course 5: The gynecologic examination: normal and abnormal

A. Target Audience

Internists, gynecologists (for review) and (to a limited extent) pediatricians. Appropriate for pediatricians for that part of the course which deals with sexually-transmitted diseases, and birth control counseling.

B. Course Objectives

At the completion of this course, the attendees will be able to

1. perform a routine gynecologic examination, including inspection of the external genitalia, vagina, cervix, adnexa, and uterus (using bimanual technique). Demonstrate proficiency in speculum technique;
2. perform a Papanicolaou smear (cancer screening test);
3. demonstrate ability to obtain and read wet preparation slides for trichomonas, yeast, and Gardnerella;
4. understand the appearance of the vulva, vagina and cervix in disease, including yeast, nonspecific vaginitis, trichomonas infections and cervicitis;
5. demonstrate proficiency in taking cultures for chlamydia and gonorrhea;
6. show proficiency in conducting an examination to rule out ectopic pregnancy, acute or subacute pelvic infection, uterine fibromyomata, and ovarian cysts;
7. understand changes in the female genital tract associated with aging;
8. understand the role of hormone replacement therapy in menopausal females.

C. Course Outline

1. Brief anatomy review. 0.5 hour.
2. Practicum in physical examination. 2.0 hours
3. Practicum in Pap smear technique; use of brush for adequate endocervical sample. 1.5 hours.
4. Practicum in culture and wet preparation slide technique. 1.0 hour.
5. Review and Practicum in pelvic masses and infection. 1.5 hours.
6. Post-menopausal hormone replacement therapy. 1.0 hour.

D. Course Structure

This course is designed to provide practice for nongynecologists in routine office gynecologic examination and care. The APTK gynecologist may be used as adjunct faculty. A certificate of proficiency will be awarded to attendees.

Course 6: The Well Child

A. Target Audience

Nonpediatricians who will occasionally be called on for judgments concerning child health issues. Pediatricians who wish to review their knowledge of normal development and prevention of disease in childhood. Nurses and midlevels should attend.

B. Course Objectives

Upon completion, the attendee will understand the normal growth and development of child from childhood to adolescence.

C. Course Outline

1. Normal delivery and problems of the healthy newborn. 1.0 hour.
2. Problems of the neonatal period. 1.5 hours.
3. Feeding problems. 1.0 hour.
4. Growth and development. Counseling parents. 1.5 hours.
5. Immunizations. 1.0 hour.
6. Adolescence and menarche. 1.0 hour.

D. Course Structure

An eight hour course, divided between seminar and Practicum, designed to review the landmarks of normal child development and the physician's role in assuring good health and preventing disease. A certificate of proficiency will be issued to attendees.

Course 7: The Sick Child

A. Target Audience

Pediatricians and others who will be expected to cover for them on questions of acute illness in children. Midlevels, internists.

B. Course Objectives

Upon completion, the attendee will be able to:

1. assess all parameters related to a sick child's illness: weight change, fever, irritability, state of consciousness, nuchal rigidity, skin changes (including rashes, turgor, and sweating), mucous membranes, ear changes, and others);
2. recognize and treat diarrhea;
3. diagnose and treat ear, nose, and throat infections. Recognize the common exanthems;
4. diagnose and refer appropriately for acute abdominal problems;
5. diagnose and refer appropriately for meningitis.

C. Course Outline

1. Assessment techniques. 2.5 hours.
2. Laboratory review. 1.5 hours.
3. Practicum in examination of the sick child. 2.0 hours
4. Treatment protocols: diarrhea, infections; treatment of common childhood diseases. 1.5 hours
5. Less common, life-threatening childhood illness. 1.5 hours.

D. Course Structure

This is a nine-hour course designed to review for pediatricians and for those who must occasionally cover their practices the most common illnesses which children experience, as well as those which present potentially life-threatening problems in office practice. Attendees will receive a certificate of proficiency at completion of the course.

ANNEX C

BASIC EQUIPMENT LIST FOR GOOD PRACTICE

Item	#/APTK	Total (4 APTKs, + 1/ Family Practice Unit)	Priority (1-3; 1=highest)	Comments
tuning fork	3	13	1	
reflex hammer	3	13	1	
sphygmomano-meter, wall-mounted	3	13	1	large and regular cuffs. one manometer to attach to each
oto-ophthalmo-scope, wall-mounted	3	13	1	wall-mounted
otoscope earpiece dispenser (Welch-Allyn	3	13	2	wall-mounted, placed near otoscope
stethoscope	3	13	1	equivalent to Littman Cardiology
vaginal speculae	3	15	1	small, med, lg, 3 each in APTKs and 3 in FP unit
clinician's black bag	1	4	2	
otoscope, portable	1	4	2	for black bag
sphygmo-manometer, portable	1	4	2	for black bag
glass syringes & needles	15	75	1	various sizes
eye acuity chart	3	13	1	can get free
baby & adult scales	1 each	4 baby, 4 adult	1	

Item	#/APTK	Total (4 APTKs, + 1/ Family Practice Unit)	Priority (1-3; 1=highest)	Comments
autoclave	1	4	1	
suture scissors	1	4	1	
forceps	1	4	1	
EKG machine	1	4	3	doubt need in FP office
glucometer	1	4	1	
containers for swabs, tongue depressors, etc.	4	20	1	
examination lamps	3	13	1	swing-arm
exam table	3	13	1	incudes gyn stirrups, fold-away
trash cans, covered	4	18	1	one for treatment room
trash can, regular	3	18	1	for non-clinical trash
flashlight	4	18	1	includesone for black bag
peak flow meter	1	4	2	for management of asthma

ANNEX D

TRIP CHRONOLOGY

April 1–18, 1995

Robert Buxbaum, MD FACP

4/1/95 Depart Boston 5:00 p.m. via United Air Lines.

4/2/95 Arrive Frankfurt 6:55 a.m. Spend day in dayroom at Sheraton-Frankfurt

4/2/95 Depart Frankfurt 5:30 p.m.

4/3/95 Arrive Almaty 5:15 a.m. Meet with Michael Borowitz, members of staff, Susan Monserud, and Julian and Mary Tudor-Hart 1:00 p.m.-3:30 p.m.

4/4/95 Travel by car Almaty-Bishkek. Leave 8:20 a.m., arr. 6:30

4/5/95 9:00 a.m. Meeting with Dean Millslagle, Abt staff, two architects, S. Monserud.
9:30 a.m. Meeting with Dr. Kyrgyzbaev, Director of Oblast Department of Health. Present also: Nuripa Mukhanova, Tokon Ismailova, Dean, Becky Copeland, translator (Denis).
10:15 Meeting with Dean on various procedures.
11:30 Meeting with Dr. Okey concerning APTK structures.
2:00 p.m. Meeting with Deputy Director of city polyclinic. Tour of polyclinic.

4/6/95 9:00 a.m. Abt office: Meeting with representative of a projected private group practice, Dr. Kulanbaev.
Visit to APTK, including visit with Dr. Rosa Abdylkalieva, pediatrician

1:30 p.m. Meet with staff of Voshkod district polyclinic
3:30 p.m. Meeting with Dr. Salieva, administrator. Oblast Hospital

4/7/95 10:00 a.m. Meeting with Dr. Tolubaeva, internist in APTK at Pediatric Polyclinic. Spend two hours observing her practice.

1:30 p.m. Tour of Oblast Hospital led by Dr. Kuranaliev, deputy to Dr. Salieva. Then meeting with Dr. Salieva. End at 4:30 p.m.

4/8/95 a.m.: Visit to practice in Kaska-Suu, Dr. Shelimova.

4/10/95	Morning and good part of afternoon spent in Dzhety-Oguz Rayon; visit hospital, polyclinic, district hospital, ambulatory, see where feldsher lives (she's off at funeral). Guide: Dr. Almerokov, deputy in charge of Rayon.
4/11/95	a.m.: Prepared presentation for Dr. Kyrgyzbaev. p.m.: Gave presentation with S. Monserud, Becky Copland to Dr. Kyrgyzbaev and various officials and clinicians of Oblast.
4/12/95	a.m. Meeting with Dr. Kyrgyzbaev. Preliminary recommendations (see annex) given to him.
	p.m. Work on minicurricula (see annex).
4/13/95	10 a.m.–noon. Meet with proposed faculty for minicurricula, six specialists from Karakol. Obtain their working agreement to collaborate.
4/14/95	9:00 a.m. Leave Karakol by car for Bishkek. Arrive Bishkek, Hotel Dostuk. 4:00 p.m. Overnight in Bishkek.
4/15/95	Leave Bishkek noon, arrive Almaty 4:00 p.m.
4/17/95	Work in Abt office on report, materials.
4/18/95	Leave Almaty 8:55 a.m., arrive Boston 4:10 p,m.